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10/599,178	09/21/2006	Angel Palacios		5432

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Madrid, 28045  
SPAIN

EXAMINER
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OBISESAN, AUGUSTINE KUNLE

ART UNIT	PAPER NUMBER
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2169

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/599,178

Applicant(s)

PALACIOS, ANGEL

Examiner

Augustine Obisesan

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 2, 4 - 7, 10 - 12, 16, 19 - 20, 22 - 24, 30, and 40 - 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 2, 4 - 7, 10 - 12, 16, 19 - 20, 22 - 24, 30, and 40 - 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1 – 2, 4 – 7, 10 – 12, 16, 19 – 20, 22 – 24, 30, and 40 – 44 are pending.

### *Claim Objections*

2. The word “REIVINDICACIONES” at the heading of claim limitation is not an English language. Appropriate correction is required.

The indentation in claim 4 – 7 is not appropriate. Appropriate correction is required.

The word “and” at the end of claim 40 renders this claim indefinite. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, the claim recites only a single step of managing calculation expression.

Claims 1 – 2, 19 – 20, and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 19, and 43 recites “there might exist different types of arboreal graphical representations”. The word “might” in this claim render the claims limitation indefinite. Claims 2 and 19 recites “another type of action”. This claim limitation is too

broad and not distinct. Therefore, claims 1 – 2, 19 – 20, and 43 are rejected for the reason enumerated above.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1 – 2, 4 – 7, 10 – 12, 16, and 40 – 41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim recites system for managing calculation expression without any processor or memory to perform this function.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 2, 4 – 7, 10 – 12, 16, 19 – 20, 22 – 24, 30, and 40 – 44 rejected under 35 U.S.C. 102(b) as being anticipated by Pagallo, US 5,544,262.

**As per claim 1, Pagallo discloses,**

**A system for managing calculation expressions** (abstract) where processing equation is "managing calculation expressions" as claimed.

**comprising means for showing one or more arboreal graphical representations** (col.8 lines 6 – 15) where graphics button is "means for showing one or more graphical representations" as claimed.

**wherein an arboreal graphical representation is an entity that shows a calculation expression in the form of a tree** (abstract and col.11 lines 30 – 43) where tree structure representation of expression is "graphical representation entity showing calculation expression in tree form" as claimed.

**and wherein there might exist different types of arboreal graphical representations**(col.8 lines 6 – 15) where graphics button displaying different graphical representation is "different types of arboreal graphical representations" as claimed.

**As per claim 2, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for editing said one or more arboreal graphical representations** (abstract and col.24 lines 32 – 58) where editing process is the "means for editing one or more arboreal graphical representations" as claimed.  
**wherein said editing might comprise one or more of the following actions: (1) creating after blank situation, (2) modifying, (3) creating after blank situation and modifying, (4) another type of action** (abstract and col.24 lines 32 – 58)

**As per claim 4, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**wherein one of said graphical representations is a TOWER STRUCTURE wherein said tower structure is characterized by the following: the nodes of the tree are arranged in vertical fashion, some nodes being located over other nodes, and said system comprises means to indicate which nodes are the parent of which nodes (fig.10).**

**As per claim 5, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**wherein one of said graphical representations is a VERTICAL STRUCTURE, wherein said vertical structure is characterized by the following: the nodes of the tree expand in vertical fashion, so that if a node is at a given position, its child nodes are located at a lower position, and it comprises means for indicating which nodes are the parents of which nodes (col.8 lines 6 – 15) where graphic button display is "vertical structure" as claimed.**

**As per claim 6, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**wherein one of said arboreal graphical representations is an ESCALATOR STRUCTURE, wherein said escalator structure is characterized by the following: the nodes of the tree are arranged in different levels of a table, and**

**certain nodes are only visible in certain levels of the table, so that the expression is read by changing levels in the positions where the transitions between nodes take place, and there might exist a summary cell that contains the total expression (col.8 lines 6 – 15) where graphic button display is “escalator structure” as claimed.**

**As per claim 7, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**wherein one of said arboreal graphical representations is a HORIZONTAL STRUCTURE, wherein said horizontal structure is characterized by the following: the nodes of the tree expand in horizontal direction, so that a parent node has a different horizontal position than its child nodes, and said system comprises means for indicating which nodes are the parents of which nodes (col.8 lines 6 – 15) where graphic button display is “Horizontal structure” as claimed.**

**As per claim 10, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for applying the feature of GROUPING OF PEERS, which is characterized because said system imposes the condition that the operators that link different sister nodes have the same type (col.2 lines 19 – 30 and col.24 lines 32 – 58) where grouping related symbols is “grouping of peers” as**

claimed.

**As per claim 11, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for applying the feature of SEQUENCIATION OF NON ASSOCIATIVE OPERATORS, which is characterized by the fact that the system imposes the obligation that the operators that join sister nodes must satisfy the associative property (col.11 lines 30 - 65 and col.14 lines 55 – 66) where determining the validity of expression is “applying feature of non-associative operators” as claimed.**

**As per claim 12, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for applying the functionality of EXPLICATIVE TEXT, whereby a descriptive text is associated to one or more of the nodes of said graphical representations (col.11 lines 30 - 65, col.14 lines 55 – 66, and col.24 lines 24 - 31).**

**As per claim 16, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for expanding and collapsing nodes in said arboreal graphical structures (col.4 lines 1 – 15).**



**Claims 19 – 20, 22 – 24, and 30** are method claim corresponding to the system claims 1 - 2, 4 – 6, and 12 respectively, and rejected under the same reason in connection to the rejection of claims 1 - 2, 4 – 6, and 12 respectively above.

**As per claim 40, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for applying the functionality of PARTIAL RESULTS, where said functionality is characterized by the following: for one or more nodes, it shows a value that is associated to said node or nodes, wherein said value depends on the evaluation of said expression for said node or nodes, and (col.4 lines 15 – 58)**

**As per claim 41, the rejection of claim 1 is incorporated and further Pagallo discloses,**

**further comprising means for converting said calculation expression into other type of entities, such as for example formulae for environments such as spreadsheet applications, search strings for database applications or Internet search engines or other types of entities (col.9 lines 66 – 67 and col.10 lines 1 – 31)**

**Claim 42** is a method claim corresponding to the system claim 40, and rejected under the same reason in connection to the rejection of claim 40 above.

**Claim 43** is a computer program claim corresponding to the method claim 19, and rejected under the same reason in connection to the rejection of claim 19 above.

**Claim 44** is a computer readable medium claim corresponding to the method claim 19, and rejected under the same reason in connection to the rejection of claim 19 above.

### ***Conclusion***

6. The prior made or record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: Mathematical expression recognizing device, mathematical expression recognizing method, character recognizing device and character recognizing method, US 7,181,068 authors: Suzuki et al.

TITLE: Method and apparatus for preparing a document containing information in real mathematical notation, US 5,559,939 authors: Yutaka et al.

TITLE: Expression Editor, US 6,610,106 author: Jenks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Augustine Obisesan whose telephone number is 571-272-2020. The examiner can normally be reached on 7:30 AM - 5:00 PM EST.

Application/Control Number:  
10/599,178  
Art Unit: 2169

Page 10


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre Vital can be reached on 571-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Augustine Obisesan

Patent Examiner

A.U.2169

  
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